IN THE CLAIMS:

1. (Currently Amended) A breathing circuit component or connector having an interior for conveying respiratory gas ~~comprising~~ comprising:

a sensor entry port configured to receive a ~~sensor~~ sensor, and

a locating depression configured to receive a complementary locating tooth from a sensor, the interconnection of said depression and a tooth providing a predetermined orientation of a sensor within said interior.

2. (Currently Amended) A breathing circuit component as claimed in claim 1 further comprising a sensor for locating within said ~~port including:~~ sensor entry port, said sensor including

sensor housing adapted for positioning in said gas flow, said sensor housing having a longitudinal axis substantially perpendicular to said ~~humidified gases~~ gas flow and a sensing end,

a locating tooth configured to mate with said ~~depression~~ depression, and

at least one projecting tab, extending laterally from said sensor housing, said at least one projecting tab providing surfaces which enable liquid condensate to disperse away from said sensing end of said sensor housing.

3. (Currently Amended) A breathing circuit component as claimed in claim 2 wherein said sensor ~~comprise~~ comprises two projecting tabs.

4. (Currently Amended) A breathing circuit component as claimed in claim 2 or claim 3 wherein said two projecting ~~tab~~ tabs are oppositely positioned around said sensor housing.

5. (Currently Amended) A breathing circuit component as claimed in claim 2 or claim 3 wherein each said ~~at least one~~ projecting tab is aligned parallel to said gas flow.

6. (Currently Amended) A breathing circuit component as claimed in claim 2 or claim 3 wherein liquid condensate is dispersed along ~~the~~ lines of intersection between said sensor housing and each said ~~at least one~~ tab, there existing a localised area of low surface tension along said lines of intersection.

7. (Currently Amended) A breathing circuit component as claimed in claim 2 or claim 3 wherein ~~said a~~ said sensor ~~comprise two sensor housings;~~ comprises a temperature sensor housing ~~means~~ and a flow rate sensor housing.

8. (Original) A breathing circuit component as claimed in claim 7 wherein said temperature sensor housing and said flow rate sensor housing each comprise a temperature dependent resistance.

9. (Currently Amended) A breathing circuit component as claimed in claim 8 wherein temperature dependent resistance is occasionally heated to a predetermined difference temperature above the temperature of said ~~gases~~ gas flow, and the power required to maintain said predetermined difference temperature providing an indication of the flow rate of said gas.

10. (Original) A breathing circuit component as claimed in claim 7 wherein said flow rate sensor housing is exposed at or near the sensing end while said temperature sensor housing is encapsulated at or near the sensing end of the temperature sensor housing.

11. (Original) A breathing circuit component as claimed in claim 9 wherein said temperature and flow rate sensor housing are spaced across said gas flow in order that heat produced from said flow rate sensor housing has substantially minimal effect on said temperature sensor housing.

12. (Currently Amended) A breathing circuit component as claimed in claim 11 wherein said flow rate sensor housing is positioned ~~up-stream~~ downstream of said temperature sensor housing in order that heat produced by said flow rate sensor housing does not effect said temperature sensor housing.

13. (Currently Amended) A breathing circuit component as claimed in claim 2 or claim 3 wherein said ~~gases~~ gas flow is ~~channelled~~ channeled within a conduit of known cross-sectional area, at least in the region adjacent said sensor, and is provided with said sensor entry port adapted to receive said sensor, the positioning of said temperature and flow rate sensor housing relative to said gas flow being controlled by the interconnection of said locating depression and tooth.

14. (Currently Amended) A breathing circuit component or connector having an interior for conveying respiratory gas ~~comprising~~ comprising:

a gas inlet communicating with said interior and configured to connect to an outlet of humidifier or other breathing assistance apparatus,

a gas outlet communicating with said interior and configured to connect to a conduit,

a sensor entry port configured to receive a ~~sensor~~ sensor, and

a locating depression configured to receive a complementary locating tooth from a sensor, the interconnection of said depression and a tooth providing a predetermined orientation of a sensor within said interior.

15. (Currently Amended) A breathing circuit component as claimed in claim 14 wherein said sensor entry port comprises an annular cylinder having ~~an passage~~ a passage communicating with and extending from said interior, said passage being substantially perpendicular to said interior.

16. (Currently Amended) A breathing circuit component as claimed in claim 15 wherein said locating depression ~~comprising~~ comprises a notch in the end of said cylinder distant said interior.

17. (Original) A breathing circuit component as claimed in claim 16 wherein said notch is substantially "V" shaped.

18. (Currently Amended) A breathing circuit component as claimed in claim 17 wherein ~~the base~~ a base of said "V" shaped notch is rounded.

19. (Currently Amended) A breathing circuit component as claimed in claim 18 wherein ~~the diameter~~ a diameter of said passage ensures a substantially airtight seal against a sensor located therein.

20. (Currently Amended) A breathing circuit component as claimed in claim 19 wherein said inlet ~~including~~ includes an exterior surface comprising a tapered male portion configured to connect to a tapered female portion of an inner surface of an outlet of humidifier, or other breathing assistance apparatus.

21. (Currently Amended) A breathing circuit component as claimed in claim 20 wherein said gas outlet ~~including~~ includes an inner surface configured to form a substantially airtight seal against an exterior surface of a conduit.

22. (Currently Amended) A breathing circuit component as claimed in claim 21 wherein said inner surface of said gas outlet and ~~said~~ the exterior surface of ~~said~~ the conduit are permanently bonded.

23. (Original) A breathing circuit component as claimed in claim 22 further comprising a flow sensor having a substantially cylindrical exterior configured to form an airtight seal against said passage, a sensing end and a locating tooth configured to mate with said locating depression and locate said sensing end in predetermined location or orientation within said interior.

24. (Original) A breathing circuit component as claimed in claim 23 wherein said tooth is substantially "V" shaped.

25. (Currently Amended) A breathing circuit component as claimed in claim 24 wherein ~~the base~~ a base of said "V" shaped tooth is rounded.